

REMARKS

The foregoing Amendment and remarks which follow are responsive to the final Office Action mailed November 19, 2002, in relation to the above-identified patent application. In that Office Action, the Examiner rejected Claims 1, 4, 6, 7, 13, 14, 17-23 and 25 under 35 U.S.C. §102(e) as being anticipated by the Glenn reference. The Examiner also rejected Claim 5 under 35 U.S.C. §103(a) as being unpatentable over the combination of the Glenn and Zimmerman references.

In Applicant's prior Amendment filed September 17, 2002, extensive arguments were presented in an attempt to distinguish the pending claims from the cited Glenn reference. More particularly, each of the pending independent claims was amended to describe the chip paddle being "in at least one part thicker than at least a portion of the leads". In the Remarks section of the September 17, 2002 Amendment, Applicant correlated the aforementioned limitation to Figure 8 of the originally filed application, and argued at length the absence of any teaching or suggestion in the Glenn reference regarding the advantages attendant to altering the thickness of the chip paddle relative to the leads as described and claimed in the present application.

In the Response to Arguments section of the latest, final Office Action, the Examiner addressed Applicant's arguments, and indicated that the Glenn reference still anticipated the amended independent claims presented in the September 17, 2002 Amendment since any one of Figures 3-6 of the Glenn reference depicts a portion of the chip paddle 24 being thicker than at least a portion of the leads 30 (emphasis added in the Office Action). In this regard, the Examiner further indicated that none of the claims in the present application recite specific locations of the chip paddle or the leads where one thickness dimension is greater or less than another thickness

dimension. Based on this reasoning, the Examiner concluded that the Glenn reference does anticipate the thickness limitations that were recited in the amended independent claims presented in the September 17, 2002 Amendment.

Based on these remarks of the Examiner, by this Amendment, Applicant has further amended each of independent Claims 1, 13 and 19 to describe the chip paddle as having a maximum thickness which exceeds a maximum thickness of each of the leads. In addition to this particular limitation being inserted into each of independent Claims 1, 13 and 19, Applicant has made a number of further clarifying changes thereto, and to Claims 4, 6, 7, 17, 18, and 25 as well. Applicant respectfully submits that the above-described modifications to independent Claims 1, 13 and 19 address the Examiner's arguments as presented in the latest Office Action, and avoid the teachings of the cited Glenn reference for the same reasons discussed at length in Applicant's September 17, 2002 Amendment. Thus, Applicant respectfully submits that the present Amendment does not introduce new issues which would require further searching on the part of the Examiner, and therefore respectfully requests that the same be considered and entered by the Examiner.

Additionally, Applicant notes that in the final Office Action, the Examiner did not address the argument presented in the September 17, 2002 Amendment regarding the Section 103(a) rejection being inappropriate due to the Glenn reference and the present application being owned by the same person or subject to assignment to the same person in accordance with 35 U.S.C. §103(c). Applicant respectfully repeats this argument, and directs the Examiner's attention to the Glenn reference which designates Amkor Technology, Inc. as the assignee, and the assignment for the present application at Reel 011625, Frame 0008 which also identifies Amkor Technology.

Inc. as the assignee of the present application.

On the basis of the foregoing, Applicant respectfully submits that the stated grounds of rejection have been overcome, and that Claims 1, 4-7, 13, 14, 17-23 and 25 are now in condition for allowance. An early Notice of Allowance is therefore respectfully requested.

Attached hereto is a marked-up version of the changes made to the claims by the current Amendment. The attached page is captioned "Version with markings to show changes made".

If any additional fee is required, please charge Deposit Account Number 19-4330.

Respectfully submitted,

Date: 2/18/03

By:



Mark B. Garred
Registration No. 34,823
STETINA BRUNDA GARRED & BRUCKER
75 Enterprise, Suite 250
Aliso Viejo, CA 92656
(949) 855-1246

T:\Client Documents\AMK\OR\048\allowmend.org.wpd
MBG/kaw/021403

VERSION WITH MARKINGS TO SHOW CHANGES MADEIn the Claims:

Please amend the following claims:

1. (Four Times Amended) A semiconductor package, comprising:

a semiconductor chip having an upper surface provided with a plurality of input/output pads ~~on its upper surface thereon~~;

a chip paddle adjacent a bottom surface of the semiconductor chip, said chip paddle having an upper surface and a lower surface;

a plurality of leads surrounding the chip paddle and having upper and lower surfaces, wherein ~~the upper surface of the chip paddle and at least one portion of an upper surface of the leads are in approximately a common plane and wherein the chip paddle is in at least one part thicker than at least a portion has a maximum thickness which exceeds a maximum thickness of each of the leads~~;

conductive wires for electrically connecting the input/output pads of the semiconductor chip to the leads; and

a package body comprised of an encapsulation material that encapsulates the semiconductor chip, the conductive wires, the chip paddle and the leads, wherein ~~portions of the chip paddle and the leads are externally exposed at a bottom surface of the chip paddle and the leads in the package body~~.

4. (Twice Amended) The semiconductor package as set forth in claim 1, wherein:

~~the lower surface of the chip paddle and a the lower surface of each of the~~

internal leads are in a common plane, and wherein the chip paddle is thicker than the leads.

6. (Twice Amended) The semiconductor package as set forth in claim 1, wherein: each of the leads ~~have~~ has an etched part at an end facing the chip paddle.

7. (Twice Amended) The semiconductor package as set forth in claim 1, wherein: the lower surfaces of the leads are externally exposed ~~at their side surfaces and bottom surfaces in the package body~~.

13. (Four Times Amended) A packaged semiconductor, comprising:
a chip paddle adapted to receive a semiconductor chip, said chip paddle having an upper surface, a lower surface, and an intermediate surface positioned between and parallel to the upper surface and the lower surface;

a plurality of leads surrounding the chip paddle ~~wherein~~ the chip paddle and the leads ~~comprise~~ comprising a leadframe wherein the intermediate surface of the chip paddle and at least one portion of an upper surface of ~~each~~ of the leads are in approximately a common plane, and wherein the chip paddle is ~~at least one part thicker than~~ at least one portion has a maximum thickness which exceeds a maximum thickness of ~~each~~ of the leads; and

the leadframe ~~being~~ adapted to receive a package body comprised of encapsulation material for encapsulating the chip paddle and the leads, wherein ~~portions~~ of the chip paddle and the leads are externally exposed ~~at a bottom surface of the chip paddle and the leads in the package body~~.

17. (Twice Amended) The packaged semiconductor as set forth in claim 13, wherein:

each of the leads ~~have~~ has an etched part at an end facing the chip paddle.

18. (Twice Amended) The packaged semiconductor as set forth in claim 13, wherein:

~~each of the leads are~~ has a lower surface which is externally exposed at their side surfaces and bottom surfaces in the package body.

19. (Thrice Amended) A package for mounting a semiconductor chip, comprising:

a leadframe, ~~the leadframe~~ comprising:

a chip paddle, wherein a surface of the chip paddle is externally exposed from ~~in~~ the package; and

a plurality of leads surrounding the chip paddle, wherein a surface of each of the plurality of leads is externally exposed from ~~in~~ the package;

means for receiving encapsulating material for encapsulating the leadframe;

means for locking the encapsulating means to the chip paddle;

means for providing a fluid path for the encapsulating means during encapsulation of the leadframe; and

said means for locking and said means for providing a fluid path ~~are being~~ formed from a void caused by said chip paddle being ~~in at least one part thicker than at least a portion of a maximum thickness which exceeds a maximum thickness of each of~~ the leads.

25. (Thrice Amended) The package as set forth in claim 21, wherein the etched portion is located inside the package body, an upper ~~a~~ lower surface of the chip paddle and a lower surface of each of the plurality of leads are in approximately a common plane, the chip paddle is bonded to a bottom surface of a semiconductor chip and at least one of the plurality of leads has an etched part at an end facing the chip paddle.